

(d) *Temperature of lamp.* The temperature of the lamp under conditions of use shall not be such that a person may be burned in handling it.

(e) *Cable and connection.* (1) The cable or cord connecting the lamp to its battery shall be of high-grade design and materials, comparable to the specially recommended trailing cables as listed by MSHA, and shall be not more than 15 feet in length.

(2) The cable (or cord) shall be adequately protected at the battery end by a fuse in the locked battery box or housing. The cable (or cord) and the fuse shall be considered parts of the lamp, and specifications for them shall be submitted by the lamp manufacturer.

(3) The method of terminating the cable (or cord) at the lamp and at the battery housing shall be adequate, but in no case shall the cable or cord be detachable.

MSHA reserves the right to make minor changes in the requirements outlined in paragraphs (e) (1), (2), and (3) of this section (No. 9, class 2 lamps), as experience and service prove to be necessary in the interests of safety.

§ 20.10 Tests (class 1 and 2 lamps).

Such tests will be made as are necessary to prove the adequacy of a lamp or any of its parts in fulfilling the purposes for which it was designed. These tests include the following:

(a) Safety tests, including tests of safety devices, electrical contacts, and explosion-proof features.

(b) Photometric tests.

(c) Tests to demonstrate adequacy of mechanical strength.

(d) Tests of nonspilling features (storage-battery lamps of class 1).

(e) Temperature tests.

§ 20.11 Material required for MSHA records.

In order that MSHA may know exactly what it has tested and approved, detailed records are kept covering each investigation. These include drawings and actual equipment, as follows:

(a) *Drawings.* The original drawings submitted with the application for the tests and the final drawings which the manufacturer must submit to MSHA before approval is granted, to show the

details of the lamp as approved, are retained. These drawings are used to identify the lamp and its parts in the approval and as a means of checking the future commercial product of the manufacturer.

(b) *Equipment.* (1) If MSHA so desires, parts of the lamps which are used in the tests will be retained as a permanent record of the investigation and of the lamps submitted.

(2) If the lamp is approved, MSHA will require the manufacturer, as soon as his first manufactured lamps are available, to submit one complete lamp, with the approval plate attached, as a record of his commercial product.

§ 20.12 How approvals are granted.

(a) All approvals are granted by official letter from MSHA. A lamp will be approved under this part only when the testing engineers judge that the lamp has met the requirements of this part and after MSHA's records concerning the lamp are complete, including manufacturer's drawings that show the lamp as it is to be made commercially. No verbal reports of MSHA's decision concerning the investigation will be given, and no informal approvals will be granted.

(b) As soon as the manufacturer has received the formal approval he shall be free to advertise his lamp as permissible.

[Sched. 10C, May 17, 1938, as amended by Supp. 1, 20 FR 2719, Apr. 23, 1955]

§ 20.13 Approval plate.

The manufacturer shall attach, stamp, or mold an approval plate on the battery container or housing of each permissible lamp. The plate shall bear the emblem of the Mine Safety and Health Administration, and be inscribed as follows: "Permissible _____ Lamp. Approval No. _____ issued to the _____ Company." When deemed necessary, an appropriate caution statement shall be added. The size, material, and position of the approval plate shall be satisfactory to MSHA.

(a) *Purpose of approval plate.* The approval plate is a label which identifies the lamp so that anyone can tell at a